

PROTOCOL CONCERNING USE OF THE  
929-930 MHZ AND 931-932 MHZ BANDS FOR PAGING SERVICES  
ALONG THE COMMON BORDER

This Protocol is being concluded pursuant to the Agreement Between the Government of the United States of America and the Government of the United Mexican States Concerning the Allocation and Use of Frequency Bands by Terrestrial Non-Broadcasting Radiocommunication Services Along the Common Border signed June 16, 1994, herein referred to as the Agreement.

## ARTICLE I. Purposes

The purposes of this Protocol are:

1. To establish and adopt a common plan for the use of the 929-930 MHz and 931-932 MHz frequency bands for one way paging within 120 km of each side of the common border (Sharing Zone).
2. To identify channels for shared use on both sides of the common border.
3. To establish technical criteria that will permit each Administration to regulate the use of its channels.

## ARTICLE II. Definition

For the purpose of this Protocol and as provided for in Article IV of the Agreement, the term Administration(s) shall refer to the Federal Communications Commission (FCC) of the United States of America and the Secretaria de Comunicaciones y Transportes (SCT) of the United Mexican States.

### ARTICLE III. Conditions of Use

1. In the Sharing Zone, the frequencies in the bands 929-930 MHz and 931-932 MHz shall be allotted for each Administration's primary use in accordance with the tables in Appendices I and II, which are an integral part of this Protocol.
2. In the Sharing Zone, existing assignments, listed in Appendices III and IV, will be protected based on a minimum separation distance of 120 km.
3. Frequencies allotted for the primary use of one Administration may be assigned by the other Administration within the Sharing Zone in accordance with the following conditions:
  - a. The maximum power flux density (pfd) at any point at or beyond the border shall not exceed  $-86 \text{ dBW/m}^2$ .
  - b. Both Administrations shall take proper measures to eliminate any harmful interference caused by their licensees.
  - c. Each Administration shall ensure protection to stations of the other Administration that has primary use of the frequency.

- d. Stations operating under this provision shall be considered as secondary and shall not be granted protection against harmful interference from stations whose Administration has primary use of the frequency.

4. Both Administrations will promote the identification of frequencies which can be utilized by licensees with common partners/operators in the other country for establishing operational agreements in the border area. When two licensees become partners or develop operational agreements to use the same frequencies, each will provide this information to its Administration. When an Administration notifies the other of its operator's intention to use a frequency in common, the notified Administration shall determine the acceptability of the agreement and respond within a period of 60 days from the receipt of the notification.

5. The following channels are available to both Administrations on a shared basis, as indicated in Appendices I and II. In the event an Administration grants use of any of these channels in the Sharing Zone and that channel has already been assigned by the other Administration, coordination of all transmitter installations shall be required to eliminate any harmful interference that might otherwise exist and to ensure continuance of equal access to the channel by both countries, including the use of time-sharing or other techniques:

<b>929.1375 MHz</b>	<b>931.4375 MHz</b>
<b>929.2125 MHz</b>	<b>931.6875 MHz</b>
<b>929.5375 MHz</b>	<b>931.7375 MHz</b>
<b>929.5625 MHz</b>	<b>931.8875 MHz</b>
<b>929.7375 MHz</b>	<b>931.9125 MHz</b>
<b>929.7625 MHz</b>	<b>931.9375 MHz</b>

6. Assignments made by an Administration within the Sharing Zone shall be authorized subject to the Effective Radiated Power (ERP) and Antenna Height limits specified in the following table:

<b>Antenna Height Above Average Terrain (Meters)</b>	<b>Maximum ERP (Watts)</b>
0 to 304	1000
Above 304 to 457	600
Above 457 to 609	350
Above 609 to 762	200
Above 762 to 904	140
Above 904 to 1056	100
Above 1056 to 1205	75
Above 1205 to 1357	70
Above 1357	65

#### ARTICLE IV. Exchange of Data

In May of each year, the Federal Communications Commission of the United States of America and the Secretaria de Comunicaciones y Transportes of the United Mexican States shall exchange recapitulative lists of all of their country's assignments in the bands 929-930 MHz and 931-932 MHz within the Sharing Zone.

#### ARTICLE V. Cross Border Roaming

Cross border service is permitted only as roaming service and this service is permitted only as long as the service providers in each country have agreed. The roaming service is provided in accordance with the laws, regulations, standards and authorizations of the country in which the mobile is operating. The service providers shall avoid discriminatory treatment in the provision of the service.

#### ARTICLE VI. Entry Into Force and Termination

This Protocol shall enter into force on the date of signing. It shall remain in force until it is replaced by a new Protocol, or until it is terminated in accordance with Article VII of the Agreement.

IN WITNESS WHEREOF, the respective representatives have signed the present Protocol.

Done at Washington, D.C., this twenty seventh day of February, 1997, in duplicate, in the English and Spanish languages, both texts being equally authentic.

FOR THE GOVERNMENT OF THE  
UNITED STATES OF AMERICA:

FOR THE GOVERNMENT OF THE  
UNITED MEXICAN STATES:

# APPENDIX I

## 929-930 MHz Paging Channels<sup>1</sup>

<u>United States</u>	<u>Mexico</u>
	.0125
	.0375
	.0625
	.0875
	.1125*
.1375 (S)	.1375 (S)
	.1625
.1875	
.2125 (S)	.2125 (S)
	.2375*
	.2625*
.2875	
	.3125
	.3375
.3625	
	.3875*
.4125	
	.4375
.4625	
	.4875
.5125	
.5375 (S)	.5375 (S)
.5625 (S)	.5625 (S)
.5875	
.6125	
	.6375*
.6625	
	.6875*
.7125	
.7375 (S)	.7375 (S)
.7625 (S)	.7625 (S)
	.7875*
	.8125*
.8375	
.8625	
.8875	
.9125	
.9375	
.9625	
.9875	

(S) - usable and shared by both countries

\* Subject to the protection of stations licensed in the United States as listed in Appendix III.

---

<sup>1</sup> All frequencies are in MHz, relative to 929 MHz



## Appendix II

### 931 - 932 MHz

	Frequency <sup>2</sup>	West <sup>3</sup> of 115	115-113	113-110	110-108	108-105	105-101	101-97
1	931.0125	+	+	+	+	+	+	-
2	931.0375	+	+	+	+	+	+	-
3	931.0625	+	+	+	+	+	+	-
4	931.0875	+	+	+	+	+	+	-
5	931.1125	+	+	+	+	+	+	-
6	931.1375	+	+	+	+	+	+	-
7	931.1625	+	+	+	+	++	+	-
8	931.1875	+	+	+	+	++	+	-
9	931.2125	++*	+	+	+	++	+	-
10	931.2375	++*	++	++	++	++	++	✱
11	931.2625	++	++	+	++	++	++	✱
12	931.2875	+	+	+	+	+	+	-
13	931.3125	+	++	++*	+	++	+	-
14	931.3375	++*	++	++	++	++	++	+
15	931.3625	++*	++	++*	+	++	+	+
16	931.3875	+	++	++*	+	+	+	+
17	931.4125	+	++	++	+	+	+	-
18	931.4375	S	S	S	S	S	S	!
19	931.4625	+	+	++	+	+	+	-
20	931.4875	+	++	++*	+	++	+	-

---

<sup>2</sup>All Frequencies are in MHz

<sup>3</sup>West Longitudes are in degrees

## Appendix II

### 931 - 932 MHz

	Frequency	West of 115	115-113	113-110	110-108	108-105	105-101	101-97
21	931.5125	++*	++	++	++	+	+	-
22	931.5375	+	++	++*	++	++	++	+
23	931.5625	+	++	++*	++	+	++	+
24	931.5875	+	++	++	++	++	++	+
25	931.6125	+	++	+	+	+	++	+
26	931.6375	+	++	++	++	++	++	+
27	931.6625	++*	++	++	++	++	++	+
28	931.6875	S	S	S	S	S	S	!
29	931.7125	+	++	++	++	++	++	+
30	931.7375	S	S	S	S	S	S	!
31	931.7625	+	+	++	++	+	++	+
32	931.7875	+	++	++	++	+	++	+
33	931.8125	+	++	+	++	+	++	-
34	931.8375	++*	++	++	++	++	++	+
35	931.8625	+	+	+	++	+	++	-
36	931.8875	S	S	S	S	S	S	!
37	931.9125	S	S	S	S	S	S	!
38	931.9375	S	S	S	S	S	S	!
39	931.9625	+	+	+	++	+	++	+
40	931.9875	+	+	+	++	+	++	+

Notation Key: + For primary use of the United States ++ For primary use of Mexico \* Refer to Appendix IV for stations that require protection

S Shared by both countries (See Article III, paragraph 5.)

### APPENDIX III

The following locations for US stations are referenced to **Appendix I** and shall be protected in accordance with the terms of Article III, Paragraph 2.

<u>Frequency (MHz)</u>	<u>Geographic Coordinates</u> <u>(degrees/minutes/seconds)</u>	
	<u>Latitude</u>	<u>Longitude</u>
929.1125	32/13/20	110/58/14
	32/50/53	117/16/25
	32/45/55	117/09/39
	32/41/47	116/56/06
	32/42/55	117/09/24
	32/50/24	117/14/52
	33/00/30	115/31/28
	33/00/54	116/58/11
	33/12/54	117/11/15
	33/19/06	116/53/04
929.2375	33/25/53	117/35/47
929.2625	33/18/30	116/50/20
929.3875	32/41/47	116/56/06
	33/00/34	116/58/11
929.6375	25/57/49	097/31/11
	27/30/23	099/30/30
929.6875	32/40/25	114/20/13
	32/42/10	114/36/38
	32/48/15	115/30/12
	27/30/23	099/30/30
	25/57/49	097/31/11
929.7875	31/28/50	109/57/30
	31/23/14	110/58/20
	32/41/47	116/56/09
	32/42/59	117/09/34
	33/00/32	116/58/13
	33/13/15	117/11/00
929.8125	33/00/34	116/58/11

## APPENDIX IV

The following locations for US stations are referenced to **Appendix II** and shall be protected in accordance with the terms of Article III, Paragraph 2.

<u>Frequency (MHz)</u>	<u>Zone</u>	<u>Geographic Coordinates</u> <u>(degrees/minutes/seconds)</u>	
		<u>Latitude</u>	<u>Longitude</u>
931.2125	West of 115	33/00/34	116/58/11
931.2375	101-97	26/07/08	097/50/00
931.2375	West of 115	33/36/22	117/48/40
931.2625	101-97	26/15/23	098/13/49
931.3125	113-110	32/13/16	110/58/13
931.3375	West of 115	33/12/53	117/11/15
931.3375	West of 115	33/36/22	117/48/40
931.3625	West of 115	33/00/34	116/58/11
931.3625	113-110	32/13/16	110/58/13
931.3875	113-110	32/13/20	110/58/14
931.4875	113-110	32/10/51	110/55/03
931.4875	113-110	32/13/20	110/58/14
931.5125	West of 115	33/00/34	116/58/11
931.5125	West of 115	32/43/05	117/09/32
931.5125	West of 115	33/12/53	117/11/15
931.5125	West of 115	32/43/00	117/09/48
931.5125	West of 115	32/46/49	117/08/07
931.5125	West of 115	33/37/34	117/55/45
931.5125	West of 115	32/41/47	116/56/06
931.5125	West of 115	33/06/55	117/09/01
931.5375	113-110	32/13/21	110/58/15
931.5625	113-110	32/13/21	110/58/15
931.5625	113-110	32/13/20	110/58/14
931.6625	West of 115	33/36/22	117/48/40
931.8375	West of 115	33/00/34	116/58/11